Mine Safety and Health Administration shall comply with the requirements of §§ 77.216–1 and 77.216–2 of this title. The plan required to be submitted to the District Manager of MSHA under § 77.216 of this title shall be submitted to the regulatory authority as part of the permit application in accordance with paragraph (a) of this section.

(3) For impoundments not included in paragraph (a)(2) of this section the regulatory authority may establish through the State program approval process engineering design standards that ensure stability comparable to a 1.3 minimum static safety factor in lieu of engineering tests to establish compliance with the minimum static safety factor of 1.3 specified in § 817.49(a)(4)(ii) of this chapter.

(d) *Coal processing waste banks.* Coal processing waste banks shall be designed to comply with the requirements of 30 CFR 817.81 through 817.84.

(e) *Coal processing waste dams and embankments.* Coal processing waste dams and embankments shall be designed to comply with the requirements of 30 CFR 817.81 through 817.84. Each plan shall comply with the requirements of the Mine Safety and Health Administration, 30 CFR 77.216–1 and 77.216–2, and shall contain the results of a geotechnical investigation of the proposed dam or embankment foundation area, to determine the structural competence of the foundation which will support the proposed dam or embankment structure and the impounded material. The geotechnical investigation shall be planned and supervised by an engineer or engineering geologist, according to the following:

(1) The number, location, and depth of borings and test pits shall be determined using current prudent engineering practice for the size of the dam or embankment, quantity of material to be impounded, and subsurface conditions.

(2) The character of the overburden and bedrock, the proposed abutment sites, and any adverse geotechnical conditions which may affect the particular dam, embankment, or reservoir site shall be considered.

(3) All springs, seepage, and ground water flow observed or anticipated during wet periods in the area of the proposed dam or embankment shall be identified on each plan.

(4) Consideration shall be given to the possibility of mudflows, rock-debris falls, or other landslides into the dam, embankment, or impounded material.

(f) If the structure meets the Class B or C criteria for dams in TR–60 or meets the size or other criteria of § 77.216(a) of this chapter, each plan under paragraphs (b), (c), and (e) of this section shall include a stability analysis of the structure. The stability analysis shall include, but not be limited to, strength parameters, pore pressures, and long-term seepage conditions. The plan shall also contain a description of each engineering design assumption and calculation with a discussion of each alternative considered in selecting the specific design parameters and construction methods.

[44 FR 15366, Mar. 13, 1979, as amended at 45 FR 51550, Aug. 4, 1980; 48 FR 44780, Sept. 30, 1983; 50 FR 16199, Apr. 24, 1985; 53 FR 43605, Oct. 27, 1988; 53 FR 48614, Dec. 1, 1988; 59 FR 52028, Oct. 20, 1994]

§ 784.17 Protection of publicly owned parks and historic places.

(a) For any publicly owned parks or any places listed on the National Register of Historic Places that may be adversely affected by the proposed operation, each plan shall describe the measures to be used.

(1) To prevent adverse impacts, or

(2) If a person has valid existing rights, as determined under § 761.16 of this chapter, or if joint agency approval is to be obtained under § 761.17(d) of this chapter, to minimize adverse impacts.

(b) The regulatory authority may require the applicant to protect historic and archeological properties listed on or eligible for listing on the National Register of Historic Places through appropriate mitigation and treatment measures. Appropriate mitigation and treatment measures may be required to be taken after permit issuance provided that the required measures are completed before the properties are affected by any mining operation.

[52 FR 4263, Feb. 10, 1987, as amended at 64 FR 70838, Dec. 17, 1999]